

Serial No.: 09/886,071

Art Unit: 2152

Page 2

6/20/01

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated hereafter (where underlining “_” denotes additions and strikethrough “-” denotes deletions).

Claims:

1. (Currently Amended) A system for facilitating communication between a user and a network of information items, comprising:

a remote data storage device for storing the information items, wherein the information items are stored in the form of pages, and wherein the pages contain a plurality of links to other information items;

a multi-layer architecture comprising:

a client device having a user interface program thereon, for allowing a user to interface with the network and request the information items;
and

a server device, in communication with the client device and in communication with the remote storage device, for handling information requests from multiple clients and for storing information retrieved from the data storage devices locally in a server cache memory;

a data collection module for collecting and storing successive actions of a particular authenticated user; and

a probability module in communication with the data collection module for calculating a probability for the desirability of the links by based on the action of the particular user and for comparing the probability to a predetermined threshold value to identify predicted links and for retrieving the predicted information items associated with the links from the remote data storage devices and enabling the storage of the predicted information items on both the client device layer and the server device layer of the

Serial No.: 09/886,071

Art Unit: 2152

Page 3

multi-layer architecture in advance of the particular user's request for the selected information items, the probabaility module further configured to:

update the probabilities assigned to the links with each successive user activity;

abort retrieving the predicted information items if the user requests an information item other than the predicted information items;

continue retrieving the predicted information items from the remote data storage devices and storing the predicted information items in the server cache memory if the user requests the predicted information item; and

downloads the user requested information item to the client from the server cache memory;

wherein the probability is calculated based solely on the actions of the particular use and not as a member of a larger set of users.

2.-5. (Canceled).

6. (Currently Amended) A method for facilitating communication between a user and a network of information items, comprising:

providing a multi-layer architecture comprising a client device and a server device;

storing the information items on a remote data storage device, wherein the information items are stored in the form of pages, and wherein the pages contain a plurality of links to other information items;

configuring the client device having a user interface program thereon, to allow a user to interface with the network and request a download of the information items;

Serial No.: 09/886,071

Art Unit: 2152

Page 4

configuring the server device for handling information requests from multiple clients and for storing information retrieved from the data storage devices locally in server cache memory;

collecting and storing successive actions of an authenticated particular user;

calculating a probability for the links associated with based on the successive actions of the authenticated particular user;

comparing the probability to a predetermined threshold value;

retrieving the information items associated with the links from the remote data storage devices; ~~and~~

enabling the storage of the information items on both the client device layer and the server device layer of the multi-layer architecture in advance of the particular user's request for the selected information items;

updating the probabilities assigned to the links with each successive user activity;

retrieving the predicted information items if the user requests an information item other than the predicted information items;

retrieving the predicted information items from the remote data storage devices;

and storing the predicted information items in the server cache memory if the user requests the predicted information item; and

downloading the user requested information item to the client from the server cache memory;

wherein the probability is calculated based solely on the actions of the particular use and not as a member of a larger set of users.

7.-10. (Canceled).

11. (Currently Amended) A method for facilitating communication between a user and a network of information items, comprising:

means for providing a multi-layer architecture comprising a client device and a server device;

Serial No.: 09/886,071

Art Unit: 2152

Page 5

means for storing the information items on a remote data storage device, wherein the information items are stored in the form of pages, and wherein the pages contain a plurality of links to other information items;

means for configuring the client device having a user interface program thereon, to allow a user to interface with the network and request a download of the information items;

means for configuring the server device for handling information requests from multiple clients and for storing information retrieved from the data storage devices locally in server cache memory;

means for collecting and storing successive actions of an authenticated particular user;

means for calculating a probability for the links ~~associated with~~ based on the successive actions of the authenticated particular user;

means for comparing the probability to a predetermined threshold value;

means for retrieving the information items associated with the links from the remote data storage devices; ~~and~~

means for enabling the storage of the information items on both the client device layer and the server device layer of the multi-layer architecture in advance of the particular user's request for the selected information items;

means for updating the probabilities assigned to the links with each successive user activity;

means for retrieving the predicted information items if the user requests an information item other than the predicted information items;

means for retrieving the predicted information items from the remote data storage devices; and

means for storing the predicted information items in the server cache memory if the user requests the predicted information item; and

means for downloading the user requested information item to the client from the server cache memory;

Serial No.: 09/886,071

Art Unit: 2152

Page 6

wherein the probability is calculated based solely on the actions of the particular use and not as a member of a larger set of users.

12-15. (Canceled).

16. (Currently Amended) A first network for facilitating communication between a user and a network of information items, comprising:

a remote data storage device for storing the information items, wherein the information items are stored in the form of pages, and wherein the pages contain a plurality of links to other information items;

a multi-layer architecture comprising:

a client device having a user interface program thereon, for allowing a user to interface with the network and request a download of the information items;

a server device, in communication with the client device and in communication with the remote storage device, for handling information requests from multiple clients and for storing information retrieved from the data storage devices locally in server cache memory; and

the first network;

a data collection module for collecting and storing successive actions of an authenticated particular user; and

a probability module in communication with the data collection module for calculating a probability for the links ~~associated with~~ based on the successive actions of the authenticated particular user, and for comparing the probability to a predetermined threshold value, and for retrieving the information items associated with the links from the remote data storage devices and enabling the storage of the information items on both the client device layer and the server device layer of the multi-layer

Serial No.: 09/886,071

Art Unit: 2152

Page 7

architecture in advance of the particular user's request for the selected information items;

wherein the probability module updates the probabilities assigned to the links with each successive user activity;

wherein the probability module aborts retrieving the predicted information items if the user requests an information item other than the predicted information items;

wherein the probability module continues retrieving the predicted information items from the remote data storage devices and storing the predicted information items in the server cache memory if the user requests the predicted information item; and

wherein the probability module downloads the user requested information item to the client from the server cache memory;

wherein the probability is calculated based solely on the actions of the particular use and not as a member of a larger set of users.

17. – 20. (Canceled).